Journal of Learning and Teaching in Digital Age, 2022, **7**(1), 90-98
https://dergipark.org.tr/en/pub/joltida
ISSN: 2458-8350 (online)

Research Paper

An Investigation of the Relationship between University Students' Digital Burnout Levels and Perceived Stress Levels

Battal Göldağ*[a]

[a](ORCID ID: 0000-0001-9717-1313), Inonu University, Turkey, battal.goldag@inonu.edu.tr
*Corresponding author

ARTICLE INFO
Received: 26 June 2021
Revised: 5 October 2021
Accepted: 23 October 2021

Keywords:
Burnout
Digital Burnout
Stress
Perceived Stress
University Students

doi: 10.53850/ joltida.958039

ABSTRACT
The aim of this study is to examine the relationship between university students' digital burnout levels and their perceived stress levels. The population of the research consists of students studying at İnönü University, Malatya, in the spring semester of the 2020-2021 academic year. The data were collected online. The sample included 925 students who voluntarily participated in the research. According to the results obtained in the research; students' digital burnout levels are above average and their perceived stress level is moderate. Students who use smart phones to connect to the Internet have higher levels of digital burnout than those who use desktop/laptop. The digital burnout levels of students studying at undergraduate level are higher than students studying at graduate level. There is no difference between students' digital burnout levels and perceived stress levels according to the classes they study and the level of use of digital devices. As students' internet usage time increases, their digital burnout levels and perceived stress levels also increase. There is a moderately positive and significant relationship between students' digital burnout levels and their perceived stress levels. As students' digital burnout levels increase, so do their perceived stress levels.

INTRODUCTION

People frequently use digital technology for such things as communicating, sharing information, learning, doing shopping, doing banking transactions and working remotely. In this period, digital devices began to be used more intensively by students and teachers. Due to the pandemic conditions, many countries have begun to provide distance education thereby increasing use of digital devices. The COVID-19 pandemic has forced schools to close in 191 countries and affected at least 1.5 billion students and 63 million primary and secondary school teachers (Unesco, 2020). Turkey is among the countries that implemented distance education for the longest time. Currently, schools in Turkey are partially open. Students studying in primary, secondary and high schools go to school on certain days of the week and take courses through distance education at other times. Faculties/vocational colleges providing applied education in universities provide face-to-face education to certain classes, while other faculties/vocational colleges continue with distance education. It has become a necessity to use these technologies due to the pandemic that has affected the whole world, which has brought about digital burnout.

Burnout

The concept of burnout can be traced back to 1974, when Freudenberger defined it as "feelings of failure and weariness or compression resulting from excessive claims related with energy, personal resources or the worker's spiritual strength" (Guadalupe & Juan-Carlos, 2013). Freudenberger (1974, 1975), has characterized burnout, besides its other symptoms, as fatigue, susceptibility to physical weakness and disease, sleep disorders, weight changes, irritability and frustration, cynical and suspicious attitudes, psycho-hardness and professional inefficiency (Bianchi, Schonfeld & Laurent, 2018). Burnout describes a state of severe stress that leads to severe physical, mental and emotional fatigue. Much worse than ordinary fatigue, burnout makes it difficult for people to cope with stress and carry out daily responsibilities. People with burnout often feel they have nothing left to give and may be afraid to get out of bed every morning. They may even adopt a pessimistic outlook on life and feel hopeless (Fraga, 2019).

“Burnout is a psychological syndrome of emotional exhaustion, depersonalization, and decreased personal success that can occur in individuals working with other people in a certain capacity. The most significant aspects of burnout syndrome include increasing emotional exhaustion, professional incompatibility, reduced productivity and professional motivation, the formation of negative attitude towards vocational activities, violations of interpersonal relations systems, lack of personal success and formation of dependent behaviors (Schaufeli & Salanova, 2007; Maslach, Jackson & Leiter, 1996; Zhao & Ding, 2020).

Symptoms of Burnout

Physical signs of burnout

Physical signs of burnout include feeling exhausted and sluggish, reduced immunity, common diseases, having the muscles or headaches very often, sleep disorders, indigestion, dizziness, tiredness and fatigue, tinnitus, weakened immune system, eczema, hay fever and asthma.

Emotional symptoms of burnout

Emotional symptoms of burnout can be sorted as failure and self- doubt, feeling helpless, trapped and defeated, feeling alone in the world, a condescending and negative outlook, decreased sense of satisfaction and achievement, increased irritability, boredom, lack of motivation, feelings of stagnation, low self-esteem, restlessness, an inner feeling of emptiness, anxiety, hopelessness and a sense of uselessness (Smith, Segal & Robinson, 2020).

Behavioral symptoms of burnout

Avoidance from liabilities, skipping work or going to work late and leaving early, lack of concentration, decision inability, self-doubting, performance loss, social withdrawal trends, increasing coffee and alcohol consumption, spending less time for relaxing or entertaining activities, irritability and anger, dissatisfaction, procrastination (Rožman, Treven, & Cingula, 2018; Smith, Segal & Robinson, 2020).

Burnout syndrome has been one of the most discussed mental health problems in modern societies in recent years. In a world facing major socioeconomic challenges, people experience ever-increasing pressure in their daily lives, especially in the workplace (Heinemann & Heinemann, 2017), thus affecting productivity and performance (Packirisamy, Meenakshy & Jagannathan, 2017).

Burnout is a state of emotional, physical and mental exhaustion caused by too much and prolonged stress. It occurs when the individual feels distressed, emotionally tired, exhausted and so cannot meet the constant demands. As stress continues, the individual begins to lose the interest and motivation that initially drove him to take on a particular role (Smith, Segal & Robinson, 2020).

Digital Burnout

Digital Technology has become an integral part of modern life. The use of digital technology is "a general term that covers various devices, services and types of use" (Dienlin & Johannes, 2020).

According to the report 'We are Social (2021)', the world population is 7.83 billion while the number of mobile phone users is 5.22 billion (66.6%), the number of users with internet access 4.66 billion (59.5%), and active social media users 4.20 billion (53.6%). Average daily internet usage time is 6 hours 54 minutes, social media usage time is 2 hours 25 minutes, television watching time is 3 hours 24 minutes, listening to music from the internet is 1 hour 31 minutes and playing games is 1 hour 12 minutes.

Despite the fact that digital tools have an effect that relaxes, entertains or helps people to spend their free time, excessive use of these tools brings digital burnout.

Digital burnout describes the negative impact of technology on our mental and physical health, along with symptoms such as restlessness, cognitive problems, emotional fatigue, and anxiety or stress. It occurs when we fail to turn electronics off and instead allow them to take over our lives; as a result, it affects our relationships, work performance and social activity (Grossmann, 2019). However, due to the pandemic that has affected the whole world, it has become a necessity to use these technologies. People have started to use these technologies more frequently to do their work from home and receive their education remotely. Caused by such requirements, digital burnout or feelings of anxiety, exhaustion and apathy caused by spending too much time on digital devices have been a growing problem. As technology makes us more dependent on each other and outbreaks us to bring in computers to work, pushing for tablets and smartphones to trust, the risk of extinction increases (McLean, 2020). The problem of digital burnout, however, is specifically related to fatigue, anxiety, depression, or decreased interest in a job, caused by too much time on digital devices. Digital burnout can be difficult to diagnose, because the problem develops slowly and people may not know they run up too late (McLean, 2020).

Burnout can also be regarded as being always in an online connection via smartphones, laptops and tablets, which will predispose us to burnout exacerbated by digital overuse in times of lockdown. This excessive use of digital technology in times of lockdown will contribute more to digital burnout (Sharma e t al., 2020)

While some signs and symptoms of digital-induced burnout are similar to general burnout, the main difference between the two is that the primary source – prolonged use of digital devices – is known. (Marius, 2021).

Stress

Stress is “a feeling of physical tension and/or anxiety when it is thought that the individual cannot cope with the demands placed on him” (Hellriegel and Slocum, 2008). According to Selye (1976), stress is "the body's indistinct response to any demand made on itself"; that is, the rate we live at any given moment. All living creatures are under stress, and anything pleasant or unpleasant that accelerates the intensity of life causes a temporary increase in stress, thus creating a corrosive effect on the body. A painful blow and a passionate kiss can be equally stressful. According to Folkman & Lazarus (1984), stress is "a state resulting from the organism's interaction with a harmful stimulus or environment", and is an uncertain reaction of the body to an environmental demand (Soytürk, 2011).

Perceived stress is the feelings or thoughts an individual has about how stressed they are at a particular time or during a particular period of time. It includes the uncontrollability and unpredictability of one's life, how often one has to deal with disturbing difficulties, how much change has occurred in one's life, and confidence in one's ability to cope with problems or difficulties (Phillips, 2013).

When the conducted studies are examined; Reinecke et al. (2016) stated in their study that multiple transactions on the internet, sending, receiving and checking private e-mails and messages on social media increase the level of perceived stress of individuals. The indirect effect of the increase in the burden of communication manifests itself as a decrease in the level of burnout, depression/anxiety and psychological well-being. computer-mediated communication (CMC) behavior that, ultimately, increases their risk of stress and psychological health impairments.

Thomée, Eklöf, Gustafsson, Nilsson, and Hagberg (2007) in their study in Sweden with 1 year follow-up, found that high-level use of digital devices (computer, mobile phone) increased stress and depression. Again, Thomée, Härenstam, and Hagberg (2011) have carried out a study with 4156 young adults (20-24) in Sweden with 1-year follow-up and concluded that there is a correlation between stress, sleep disturbance and depression, and excessive cell phone use. Akın and İskender (2011) determined that there is a positive relationship between excessive internet use and depression, anxiety and stress in a study involving 300 university students. Samaha and Hawi (2016) concluded that there is a weak positive relationship between excessive phone use and perceived stress level, and Lepp, Barkley, and Karpinski (2014) concluded that students who use excessive phone have higher anxiety levels. Bilge, Baydili and Göktaş (2020), in their study, concluded that there is a moderate and positive relationship between excessive social media use and depression, anxiety and stress.

Purpose of the Research

The unexpected developments in the world - the present pandemic - have changed all the habits of people. The businesses, shopping, banking transactions, education services have all started to be done remotely by using the latest technological tools. Therefore, the use of computers, smartphones and tablets has also increased enormously. Continuous exposure to these devices and digital stimuli has affected people both physically and psychologically. Developments in the digital world affect people both positively and negatively. On the one hand, the Internet provides the opportunity for people to have a pleasant time, research, access and share information, on the other hand, its excessive use can cause introversion, depression and stress. If the stimuli that causes stress are not dealt with, a feeling of pessimism emerges and this manifests itself as anxiety, depression, insomnia and fatigue (Gökler & Işıtan, 2012). Determining the relationship between the digital burnout levels of university students and their perceived stress levels is going to contribute to the measures to be taken in this direction. In this context, the aim of the research is to examine the relationship between the digital burnout levels of university students and the stress they perceive.

METHOD

Model of the Research

Relational survey model, one of the quantitative research methods, was used in the research. “Scanning models are research approaches that aim to describe a past or present situation as it is. The event, individual or object that is the subject of the research is tried to be defined in its own conditions and as it is” (Karasar, 2005). In survey research, a sample is selected from the population to describe the views or characteristics of a large community on a subject. (Fraenkel, Wallen & Hyun, 2012).

Population and Sample

The population of the research consists of students studying at Malatya İnönü University in the spring semester of the 2020-2021 academic year. 925 students who voluntarily participated in the sample were included. Demographic characteristics of the participants are given in Table 1.

Table 1. Demographic Characteristics of Participants

		Frequency	Percent
Gender	Female	607	65.6
	Male	318	34.4
Level of education	Associate Degree	158	17.1
	Undergraduate	721	77.9
	Graduate	46	5.0
Class	1st Grade	294	31.8
	2nd Grade	220	23,8
	3rd Grade	193	20.9
	4th Grade	203	21.9
	5th Grade	15	1.6
Internet Usage Time (Excluding Classes)	1-3 hours	145	15.7
	4-6 hours	362	39.1
	7-10 hours	275	29,7
	10 hours or more	143	15.5
Do you have a smartphone?	Yes	904	97.7
	No	21	2.3
Do you have a computer?	Yes	746	80.6
	No	179	19.4
Do you have a tablet?	Yes	211	22.8
	No	714	77.2
Device Used to Connect to the Internet	Desktop/Laptop	208	22.5
	Tablet	12	1.3
	Smartphone	705	76,2
Level of Using Digital Devices	Poor	25	2.7
	Moderate	403	43.6
	Satisfactory	497	53.7
	Total	925	100.0

Data Collection Tools

Perceived Stress Scale (PSS): The scale, which was developed by Cohen, Kamarck and Mermelstein (1983) and adapted into Turkish by Eskin et al. (2013), consists of a 5-point Likert type and a total of 14 items. The scale is designed to measure how stressful some situations in a person's life are perceived. 7 items with positive expressions are scored in reverse. The scores of PSS range from 0 to 56. A high score indicates that the person has an excessive perception of stress. The Cronbach alpha coefficient of the Turkish form of the scale is 0.87 (Eskin et al. 2013). The Cronbach Alpha internal consistency coefficient we calculated in this study is 0.85.

Digital Burnout Scale: The scale was developed by Erten & Özdemir (2020). It consists of 24 items and three sub-factors named "digital wear", "digital deprivation" and "emotional exhaustion". High scores to be obtained from the scale indicate that the level of digital burnout is high. The Cronbach's alpha internal consistency coefficient of the scale is 0.946. The internal consistency coefficient of Cronbach's Alpha which was calculated in this study is 0.960.

Data Analysis

Data were collected online. The links of the scales used to reach the students were shared through the learning management system used by the students for distance education and in the social media groups created to communicate with the students. In the normality test, the kurtosis and skewness coefficients were found to be in the range of ± 1 (George & Mallery, 2016) and the data showed normal distribution. Therefore, data were tested using the t-test, one-way analysis of variance test (ANOVA), for independent groups with descriptive analyzes (mean and standard deviation) and parametric analyzes. Pearson Product Moment Correlation Analysis was used to determine the relationship between students' digital burnout levels and their perceived stress levels. The significance level was taken as $p<.05$.

FINDINGS

In this section, the findings obtained as a result of the statistical analysis of the collected data and their interpretations are presented.

Table 2. The Results of Pearson Product Moment Correlation Analysis Conducted to Determine the Relationship between Students' Digital Burnout Levels and Perceived Stress Levels

Variable	n	r	p
Digital Burnout Perceived Stress	925	0,585	,000

According to Table 2, there is a moderately positive and significant relationship between students' digital burnout levels and their perceived stress levels (r=0.585, p<.01). Accordingly, as students' digital burnout levels increase, so do their perceived stress levels.

Table 3. t-test Analysis Results of Students' Digital Burnout Levels and Perceived Stress Levels by Gender

	Gender	n	$\bar{x}$	S	Sd	t	p
Digital Burnout	Female	607	72.21	23,22	923	5,651	,000
	Male	318	62.86	25.11			
Perceived Stress	Female	607	29.51	9.13	923	3,682	,000
	Male	318	27.16	9.32			

According to Table 3, a statistically significant difference was found between the digital burnout levels of male and female students participating in the research (t(923)=-5,651, p<0,05) in favor of male students. Accordingly, male students' digital burnout levels ($\bar{x}$ =62,86) are lower than female students ($\bar{x}$ = 72,21). Similarly, a statistically significant difference was found in favor of male students between perceived stress levels (t(923)=3,682, p<0,05). Male students' perceived stress levels ($\bar{x}$ =27,16) were found to be lower than females' ($\bar{x}$ = 29,51).

Table 4. ANOVA Analysis Results of Students' Digital Burnout Levels and Perceived Stress Levels According to the Device They Use to Connect to the Internet

		Sum of Squares	Sd	Mean Squares	F	p	Difference
Digital Burnout	Between groups	7262,631	2	3631,316	6,226	,002	A<C
	Within groups	537747,364	922	583,240			
	Total	545009,996	924				
Perceived Stress	Between groups	339,980	2	169,990	1,985	,138	No difference
	Within groups	78974,792	922	85,656			
	Total	79314,772	924				

A- Desktop/Laptop B- Tablet C- Smartphone

According to Table 4, a significant difference was found between the students' digital burnout levels (F(2; 922) = 6,226, p<0,05) according to the devices they use to connect to the internet. According to the results of the Tukey test conducted in order to determine among which groups the differentiation was, the differences were found to exist between the students using smartphone ($\bar{x}$=70,56) and those using desktop/laptops ($\bar{x}$=63,98). There was no significant difference between the stress levels perceived by the students according to the devices they use to connect to the internet (F(2; 922) = 1,985, p>0,05).

Table 5. ANOVA Analysis Results of Students' Digital Burnout Levels and Perceived Stress Levels by Educational Levels.

		Sum of Squares	Sd	Mean Squares	F	p	Difference
Digital Burnout	Between groups	4010,529	2	2005,265	3,417	,033	C<B
	Within groups	540999,467	922	586,767			
	Total	545009,996	924				
Perceived Stress	Between groups	801,918	2	400,959	4,709	,009	A<B
	Within groups	78512,854	922	85,155			
	Total	79314,772	924				

A- Associate Degree B- Undergraduate C- Postgraduate

According to Table 5, a significant difference was found between the students' digital burnout levels (F(2; 922) = 3,417, p<0,05) according to the education levels of the students participating in the research. According to the results of the Tukey test, which was

conducted to determine between which groups the differentiation is, this difference is between the students studying at undergraduate level ($\bar{x}$=70,04) and those studying at graduate level ($\bar{x}$=62,60). Likewise, a significant difference was found between the students' perceived stress levels (F(2; 922) = 4,709, p<0,05). This difference is between students studying at undergraduate level ($\bar{x}$=29,19) and students studying at associate degree level ($\bar{x}$=27,17).

Table 6. ANOVA Analysis Results of Students' Digital Burnout Levels and Perceived Stress Levels by Grades.

		Sum of Squares	Sd	Mean Squares	F	p	Difference
Digital Burnout	Between groups	981,567	4	245,392	,415	,798	No difference
	Within groups	544028,428	920	591,335			
	Total	545009,996	924				
Perceived Stress	Between groups	264,518	4	66,129	,770	,545	No difference
	Within groups	79050,254	920	85,924			
	Total	79314,772	924				

According to Table 6, students' digital burnout levels (F(4; 920) = ,417, p>0,05) and perceived stress levels (F(4; 920) = ,770, p>0,05) were not found to have a significant difference.

Table 7. ANOVA Analysis Results of Students' Digital Burnout Levels and Perceived Stress Levels According to Daily Internet Use Time.

		Sum of Squares	Sd	Mean Squares	F	p	Difference
Digital Burnout	Between groups	43220,048	3	14406,683	26,442	,000	A-B<C-D
	Within groups	501789,948	921	544,832			
	Total	545009,996	924				
Perceived Stress	Between groups	1457,783	3	485,928	5,748	,001	A-B<C-D
	Within groups	77856,989	921	84,535			
	Total	79314,772	924				

A- 1-3 hours B- 4-6 hours C- 7-10 hours D- more than 10 hours

According to Table 7, a significant difference was found among the digital burnout levels (F(3; 921) = 26,442 p<0,05) of students participating in the research according to their daily internet usage times. According to the results of the Tukey test, which was conducted to determine between which groups the differentiation was, this difference was found among the students using the internet for 1-3 hours ($\bar{x}$=58,28); 4-6 hours ($\bar{x}$=65,27); 7-10 hours ($\bar{x}$=74,61) and more than 10 hours a day ($\bar{x}$=78,48). Likewise, a significant difference was found between students' perceived stress levels (F(2; 922) = 4,709, p<0,05). This difference exists among the students who use the internet for 1-3 hours ($\bar{x}$=26,75); 4-6 hours ($\bar{x}$=28,02); 7-10 hours ($\bar{x}$=29,68) and more than 10 hours a day ($\bar{x}$=30,53).

Table 8. ANOVA Analysis Results of Students' Digital Burnout Levels and Perceived Stress Levels According to Digital Device Usage Levels.

		Sum of Squares	Sd	Mean Squares	F	p	Difference
Digital Burnout	Between groups	1378,231	2	689,116	1,169	,311	No difference
	Within groups	543631,764	922	589,622			
	Total	545009,996	924				
Perceived Stress	Between groups	492,853	2	246,427	2,883	,056	No difference
	Within groups	78821,919	922	85,490			
	Total	79314,772	924				

According to Table 8, a significant difference was not found between students' digital burnout levels (F(2; 922) = 1,169, p>0,05) and perceived stress levels (F(2; 922) = 2,883, p>0,05) considering their use of digital learning devices.

Table 9. Descriptive statistics of students' digital burnout levels and perceived stress levels

	N	Minimum	Maximum		Sd
Digital Burnout	925	24.00	120.00	68.99	24.28
Perceived Stress		00,00	56,00	28.71	9.26

According to Table 9, the digital burnout levels of the students ($\bar{x}$=68,99) are above average and the perceived stress level ($\bar{x}$ =28,71) is moderate.

DISCUSSION AND CONCLUSIONS

According to the result we obtained in the research; students' digital burnout levels are above average and their perceived stress level is moderate. As a response to the COVID-19 outbreak, many governments have taken steps such as spatial distance - staying home - to reduce its spread and impact (Király et al., 2020). The COVID-19 pandemic and social isolation have predominantly affected adolescents and young adults (Göker & Turan, 2020). As young people stay at home and their communication with other people and friends decreases, digital technologies have started to be used a lot. The frequent use of these technologies has brought along digital burnout. This increases the stress, anxiety and depression levels experienced by people.

It was concluded that male students' digital burnout levels were lower than female students. When the perceived stress levels were examined, it was concluded that the perceived stress levels of male students were lower than female students. According to the results obtained in the studies conducted on different student groups, female students' perceived stress levels are higher than male students (Leung, Lam & Chan, 2010; Andreou et al., 2011; Deasy et al., 2015; Shaw, Peart & Fairhead, 2017; Reyhan & Karaca, 2016; Hancıoğlu, 2017; Çalışkan et al., 2018). However, according to the results obtained in some other studies, there is no difference between the perceived stress levels of female and male students (Baştuğ, Metin & Bingöl, 2014; Ateşoğlu & Erkal, 2016; Akınlotu & Ertan, 2018; Fasoro et al. , 2019; Deles & Kaytez, 2020).

Students who use smartphones to connect to the internet have higher digital burnout levels than students who use desktop / laptop. The fact that students always have their mobile phones with them allows them to connect to the internet at any time. With social isolation, people have started to use social media and digital games too much to communicate and spend their spare time. According to the results of Balhara et al.'s study, approximately half of the participants (50.8%) stated that their gaming habits increased during this period (Balhara et al. 2020). There is no difference between the stress levels perceived by the students according to the devices they use to connect to the internet.

The digital burnout levels of undergraduate students are higher than those of studying at graduate level. Likewise, the perceived stress levels of students studying at the undergraduate level are higher than the students studying at the graduate level. The number of courses taken by graduate students is less than undergraduate students. At the same time, some of the graduate students are working in a job. Undergraduate students, on the other hand, spend most of the day with digital devices as they are enrolled in more courses, and they use these devices to communicate with their friends because they are away from school.

This study concluded that there was no difference between students' digital burnout levels and perceived stress levels according to their grades. Deleş & Kaytez (2020), on the other hand, found that the stress levels of the senior students were significantly higher than the 1st, 2nd and 3rd graders. Moreover, there is a difference between the digital burnout levels and perceived stress levels according to the duration of internet use of the students. As students' internet usage time increases, their digital burnout levels and perceived stress levels also increase. In his study with university students, Gülnar (2016) concluded that as the duration of internet use increases, so do the students' stress levels. There is no any difference between students' digital burnout levels and perceived stress levels according to their level of use of digital devices.

There is a moderately positive and significant relationship between the digital burnout levels of students and their perceived stress levels. As students' digital burnout levels increase, their perceived stress levels increase as well. People often think that they cannot imagine life without their technological devices. Studies show that the use of technology can contribute to stress (Chaves, 2020). According to the results of the annual 'Stress in America' survey of the American Psychological Association, one-fifth (about 18%) of US adults consider technology use a major source of stress in their lives (APA, 2017). In a study conducted with US adolescents, they were asked what is the effect of digital technology use on well-being, and 31% stated that the effects were mostly positive, 45% stated that the effects were neither positive nor negative, and 24% stated that the effects were mostly negative (Dienlin & Johannes, 2020).

To cope with digital burnout;

- According to the results we have obtained in our present research, 84.3% of the participants use the internet for 4 hours or more per day. (Not including the usage for lecturing purposes). This shows that they spend a lot of time in front of the screen. Being in front of the screen for too long disrupts sleep patterns, which causes health problems such as depression, stress, focusing problems, and forgetfulness. Therefore, it is necessary to shorten the screen usage time. In addition, the person should rest, relax and exercise because he/she stays in front of the screen too much.
- Due to the pandemic, it has become mandatory to use digital devices. However, other than these, opportunities should be created where we can realize our hobbies. The question "If I do not use these devices today, what should I do instead?" should be answered.
- The control of software and devices should be completely in the hands of the person. They must be at the service of the person.
- There must be a balance between online and offline life.

- It is not possible to remove digital devices and the internet from our lives, but human life is more important than anything else. Their moderate use will not only make our lives easier, but also their adverse effects on our mental and physical health will be minimized. We should use these devices only to make our life easier instead of making them the focal point of our lives. Computers, smartphones and tablets are indispensable devices in the lives of university students. It should be noted that these devices are not designed to take over life, but to facilitate learning and enrich the learning experience.
- More research is needed to show the solids of whether digital technology is harmful to its users or not.
- The use of technological tools is going to continue to increase. Instead of demonizing technology, scientific studies should be carried out on how to gain healthy and sustainable digital behaviours in our digital world.

Ethics Committee Approval: An ethics committee approval was received for this study from Inonu University Scientific Research and Publication Ethics Committee (Approval No: 17/06/2021-E.54836).

REFERENCES

Akın, A., & Iskender, M. (2011). Internet addiction and depression, anxiety and stress. *International Online Journal of Educational Sciences, 3*(1), 138–148.

Akınlotu, O.T., & Sahil Ertan, Ş. (2018). An Assessment of Perceived Stress Sources among University Students: European University Of Lefke Context. *EUL Journal of Social Sciences*, IX-I, 35-48.

Andreou, E., Alexopoulos, E. C., Lionis, C., Varvogli, L., Gnardellis, C., Chrousos, G. P., & Darviri, C. (2011). Perceived Stress Scale: reliability and validity study in Greece. *International Journal of Environmental Research and Public Health, 8*(8), 3287–3298. https://doi.org/10.3390/ijerph8083287.

APA. (2017). *Stress in America.* https://www.apa.org/news/press/releases/ stress/2017/technology-social-media.pdf.

Ateşoğlu, L. & Erkal, S. (2016). Examination of the Perceived Stress Levels of Housekeeping Staff in Hospitals. *The Journal of Academic Social Science, 4*(29), 557-573.

Balhara, Y.P.S., Kattula, D., Singh, S., Chukkali. S., & Bhargava, R. (2020). Impact of lockdown following COVID-19 on the gaming behavior of college students. *Indian Journal Public Health, 64*(6), 172-176. https://doi.org/10.4103/ijph.IJPH_465_20.PMID: 32496250.

Baştuğ, G., Metin, S.C., & Bingöl, E. (2014). Investigation of perceived stress levels together with positive and negative moods of students in school of physical education and sports. *International Journal of Science Culture and Sport*, *2*(4), 72-79. https://doi.org/ 10.14486/IJSCS209

Bianchi, R., Schonfeld, I.S. & Laurent, E. (2018). Burnout Syndrome and Depression. In *Understanding Depression.* (Y.K. Kim, Ed.).187-202. Singapore: Springer.

Bilge,Y., Baydili, K.N. & Göktaş, S.Ş. (2020). Sosyal Medya Bağımlılığını Yordamada Anksiyete, Stres ve Günlük Sosyal Medya Kullanımı: Meslek Yüksekokulu Örneği. *Bağımlılık Dergisi, 21*(3), 223-235.

Chaves, C. (2020). *"What Is a Digital Detox"*. https://www.verywellmind.com/why-and-how-to-do-a-digital-detox-4771321.

Cohen, S., Kamarck,. T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, *24*, 385-396.

Çalışkan, S., Aydoğan, S., Işıklı., B, Metintaş, S., Yenilmez, F., & Yenilmez, Ç. (2018). Assessment of Perceived Stress Level and Related Factors in University Students. *ESTUDAM Public Health Journal, 3*(2), 40-49.

Deasy, C., Coughlan, B., Pironom, J., Jourdan, D. & McNamara, P. M. (2015). Psychological distress and lifestyle of students: implications for health promotion. *Health Promotion International, 30*, 77–87. https://doi.org/10.1093/heapro/dau086.

Deleş, B., & Kaytez, N. (2020). Investigation of Stress Levels of Child Development Undergraduate Students on Health Perception. *Gümüşhane University Journal of Health Sciences, 9*(4), 365-373.

Dienlin, T., & Johannes, N. (2020). The impact of digital technology use on adolescent well-being. *Dialogues Clinical Neuroscience, 22*(2), 135-142. https://doi.org/10.31887/ DCNS.2020.22.2/tdienlinKeywords

Erten, P., & Özdemir, O. (2020). The Digital Burnout Scale Development Study. *Inonu University Journal of the Faculty of Education, 21*(2), 668-683. https://doi.org/10.17679/inuefd.597890.

Eskin, M., Harlak H., Demirkıran, F., & Dereboy, Ç. (2013). The Adaptation of the Perceived Stress Scale into Turkish: A Reliability and Validity Analysis. *New Symposium Journal, 51*(3), 132-140.

Fasoro, A. A., Oluwadare, T., Ojo, T. F., & Oni, I. O. (2019). Perceived stress and stressors among first-year undergraduate students at a private medical school in Nigeria. *Journal of Taibah University Medical Sciences, 14*(5), 425–430. https://doi.org/10.1016/j.jtumed.2019.08.003

Fraga, J. (2019). *A Guide to Burnout.* Healthline. https://www.healthline.com/health/tips-for-identifying-and-preventing-burnout.

Fraenkel, J.R., Wallen, N.E. & Hyun, H.H. (2012). How to design and evaluate research in Education. McGraw-Hill.

George, D. & Mallery, P. (2016). *Ibm Spss Statistics 23 Step by Step: A Simple Guide and Reference.* 14th. ed. Routledge.

Göker, M.E., & Turan Ş. (2020). Problematic Technology Use in the Covid-19 Pandemic. *ESTUDAM Public Health Journal.* 5(COVID-19 Special Issue): 108-14. https://doi.org/10.35232/estudamhsd.767526

Gökler, R. & Işıtan, İ. (2012). Modern çağın hastalığı; stres ve etkileri. *Tarih Kültür ve Sanat Araştırmaları Dergisi. 1*(3), 154-168.

Gülnar, B. (2016). Stres ve İnternet Kullanımı İlişkisi: Türkiye'deki Üniversite Öğrencileri Arasında Bir Alan Araştırması. *İletişim Kuram ve Araştırma Dergisi*, 42, 37-57.

Grossmann, M. (2019). *Digital Burnout on the Turn?.*

https://www.ssg.co.uk/custom/pdfs/Digital%20Burnout%20on%20the%20Turn.pdf. Guadalupe, M. G., & Juan-Carlos, A.C. (2013). New Perspectives: Towards an Integration of the concept "burnout" and its explanatory models. *Anales de psicología*, *29*(3), 800-809.

Hancıoğlu, Y. (2017). The Investigation of Relationship between Perceived Stress Level of Unıversity Students and Styles of Coping with Stress. *Journal of Management and Economics Research. 15*(1), 130-149. https://doi.org/10.11611/yead.270449

Heinemann, L.V., & Heinemann, T. (2017). Burnout Research: Emergence and Scientific Investigation of a Contested Diagnosis. *SAGE Open*, 1–12, https://doi.org/10.1177/2158244017697154/journals.sagepub.com/home/sgo

Hellriegel, D. & Slocum, J. W.(2008). *Organizational Behavior*. Cengage Learning.

Lepp, A., Barkley, J. E., & Karpinski, A. C. (2014). The relationship between cell phone use, academic performance, anxiety, and satisfaction with life in college students. *Computers in Human Behavior, 31*,343-350.

Leung, D. Y., Lam, T. H., & Chan, S. S. (2010). Three Versions of Perceived Stress Scale: Validation in a Sample of Chinese Cardiac Patients Who Smoke. *BMC public health*, 10, 513. https://doi.org/10.1186/1471-2458-10-513.

Karasar, N. (2005). *Bilimsel Araştırma Yöntemi*. Nobel Basımevi.

Kavaklı, M. & Yalçın, S.B. (2019). İnternet Bağımlılığı ve Algılanan Stres İlişkisinin Algılanan Sosyal Destek Açısından İncelenmesi. *Bağımlılık Dergisi, 20*(4), 175-18.

Király, O., Potenza, M.N., Stein, D.J., King, D.L., Hodgins, D.C., Saunders, J.B., Griffiths, M.D. et al. (2020). Preventing problematic internet use during the COVID-19 pandemic: Consensus guidance. *Comprehensive Psychiatry, 100*, 1-4. https://doi.org/10.1016/j. comppsych.2020.152180.

Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory. Manual (3rd edn).* Consulting Psychologists Press.

Marius, M. (2021). *Digital Burnout: What Are the Signs and How You Can Fight It.* https://www.ict-pulse.com/2021/02/digital-burnout-what-are-the-signs-and-how-you-can-fight-it/

Reinecke, L., Aufenanger, S., Beutel, M.E. Dreier, M., Quiring, O., Stark, B., Wölfling, K., &. Müller, K.W. (2016): Digital Stress over the Life Span: The Effects of Communication Load and Internet Multitasking on Perceived Stress and Psychological Health Impairments in a German Probability Sample, *Media Psychology*, 1-16. https://doi.org/10.1080/15213269.2015.1121832

Samaha, M. & Hawi, N.S.(2016). Relationships among smartphone addiction stress, academic performance, and satisfaction with life. *Computers in Human Behaviour*, *57*, 321-325.

Schaufeli, W.B. & Salanova, M. (2007). Efficacy or inefficacy, that's the question: Burnout and work engagement, and their relationships with efficacy beliefs. *Anxiety, Stress, and Coping, 20*(2), 177-196.

Shaw, M.P., Peart, D.J. & Fairhead, O.W.J. (2017). Perceived stress in university students studying in a further education college.ret *Research in Post-Compulsory Education*, 22(3), 442-452. https://doi.org/10.1080/13596748.2017.1362534.

Thomée, S., Eklöf, M., Gustafsson, E., Nilsson, R., & Hagberg, M. (2007). Prevalence of perceived stress, symptoms of depression and sleep disturbances in relation to information and communication technology (ICT) use among young adults—An explorative prospective study. *Computers in Human Behaviour, 23*, 1300–1321. https://doi.org/10.1016/j.chb.2004.12.007

Thomée, S., Härenstam, A., & Hagberg, M. (2011). Mobile phone use and stress, sleep disturbances, and symptoms of depression among young adults—A prospective cohort study. *BMC Public Health, 11*. https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-11-66. https://doi.org/10.1186/1471-2458-11-66.